

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A communications network, comprising:
at least one source unit (~~120, 121, 122~~) configured to generate messages for relay;
a smart node (~~110~~) capable of storing programming instructions, receiving messages for relay from said source unit, determining at least a merit value for said received messages, dynamically reprioritizing the received messages for relay based upon said merit value, and transmitting the reprioritized received messages; and
at least one portal node (~~150~~) adapted to receive said reprioritized received messages transmitted from said smart node.
2. (currently amended) The communications network as specified in claim 1, wherein said smart node comprises an electronic computer for executing said programming instructions.
3. (currently amended) The communications network of claim 1, wherein said programming instructions comprise active messages.
4. (currently amended) A communications network, (~~100~~) comprising:
at least one source unit (~~120, 121, 122~~) configured to generate messages for relay;
a smart node (~~110~~) capable of receiving programming instructions, storing said programming instructions, receiving messages for relay from said source unit, storing the received messages for relay in a queue, determining at least a merit value for said received messages, and dynamically reprioritizing the received messages for relay in said queue based upon said merit value;
at least one portal node (~~150~~) adapted to receive said retransmitted received messages from said at least one smart node for relay; and

at least one communications node ~~(160)~~ adapted to send said programming instructions to said smart node.

5. (currently amended) The communications network of claim 14, wherein said smart ~~network~~-node comprises:

- a message storage queue ~~(280)~~;
- a transmitter ~~(250)~~;
- a receiver ~~(260)~~;
- a queue controller ~~(270)~~ for writing messages received at said smart node into said message storage queue and for removing messages from said message storage queue for relay transmission by said transmitter; and
- a dynamic reprioritization controller ~~(290)~~ for specifying an order of transmission of said removed messages for relay transmission by said transmitter ~~(250)~~.

6 (currently amended) The communications network of claim 5, including at least one receiver ~~(220, 221, 222)~~ for receiving said messages for relay from said source unit.

7. (new) The communications network of claim 1, wherein said merit value for said received messages is determined heuristically.

8. (new) The communications network of claim 4, wherein said merit value for said received messages is determined heuristically.

9. (new) A method for dynamic reprioritizing messages, comprising:
- receiving messages from a source unit;
 - storing said received messages in a buffer unit;
 - determining a merit value for said received messages;

reprioritizing said received messages based upon said merit value; and
transmitting the reprioritized received messages.

10. (new) The method of claim 9, wherein said merit value for said received messages may be determined heuristically.

11. (new) The method of claim 9, wherein said received messages are stored in a queue.

12. (new) The method of claim 9, wherein a smart node reprioritizes said received messages.

13. (new) The method of claim 12, wherein said smart node transmits said reprioritized received messages.

14. (new) The method of claim 12, wherein said smart node receives programmable instructions from a communication node.